

# AROUND THE EXPERIMENT HALL

## ATOMIC MODELS OF PLANT VIRUSES

Amy Kendall (left), Michele McDonald, and Sarah Tiggelaar—all with the Stubbs Lab in the Department of Biological Sciences at Vanderbilt University—taking data at the Bio-CAT 18-ID beamline.

**Kendall:** "Our lab uses fiber diffraction data from oriented sols and dried fibers to determine the structures of flexible filamentous plant viruses. Our long-term goal is to produce atomic models based on diffraction data at resolutions close to 3 Å, but a great deal of information can be obtained at lower resolution, including the size, shape, and symmetry of the viruses.

"These viruses are of great significance as models for fundamental virology and cell biology. They have enormous potential as vectors in biotechnology and they are of considerable importance because of the damage they cause to agriculture. We also use the filamentous plant viruses as important model systems for developments in fiber diffraction."

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